

AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A character string data processing method for passing a first character string from a first object, through an interface object running under control of a computer operating system, to a second object, when an application program is run, the method comprising:

casting, in the interface object, the first character string ~~data~~ declared as a first data type as a basic string data type, whereby ~~a the~~ number of characters including null data in the first character string data is countable irrespective of ~~a the~~ declared type of the first character string ~~data of the first object~~, detecting an effective number of characters in the first character string ~~data as a~~ by analyzing its basic string data type representation, and converting the effective number of characters in the first character string to a second character string data that can be passed by the operating system to the second object, without using binary conversion to convert the first character string to a special format; and

processing, in the second object, the ~~first-second~~ character string, ~~data~~ which is declared as the first data type, as a basic string data type, irrespective of the declared type of the ~~first-second~~ character string ~~data~~.

2. (Currently Amended) The method of claim 1, wherein the basic string data ~~is type representation of the first character string data containing~~ contains string length information.

3. (Currently Amended) The method of claim 1, wherein

the application program can process a character string data ~~containing~~ null data;

the first object is the application program or a peripheral device class control object; and

the second object is a peripheral device class control object or a peripheral device service object.

4. (Currently Amended) The method of claim 3, wherein the character string ~~data~~ is bar code data.

5. (Original) The method of claim 3, wherein the application program is a POS application program.

6. (Currently Amended) A character string data processing system comprising a first object that is a client object, a second object that is a server object with respect to the first object, and an interface object for passing a first character string from the first object, through the interface object, to the second object running an application program, wherein:

the interface object comprises means for casting the first character string ~~data~~ declared as a first data type as a basic string data type, whereby the number of characters including null data in the first character string ~~data~~ is countable irrespective of ~~a the~~ declared type of the first character string ~~data of the first object~~, means for detecting an effective number of characters in the first character string ~~as~~ by analyzing its basic string data type representation, and means for converting the effective number of characters in the first character string to a second character string data that can be passed by the operating system to the second object, without using binary conversion to convert the first character string to a special format; and

the second object comprises means for processing the ~~first~~ second character string, ~~data~~ which is declared as the first data type, as a basic string data type, irrespective of the declared type of the ~~first~~ second character string ~~data~~.

7. (Currently Amended) The system of claim 6, wherein the basic string data ~~is~~ type representation of the first string data ~~containing~~ contains string length information.

8. (Currently Amended) The system of claim 6, wherein

the application program can process a character string data ~~containing~~ null data;

the first object is the application program or a peripheral device class control object; and

the second object is a peripheral device class control object or a peripheral device service object.

9. (Currently Amended) The system of claim 8, wherein the character string ~~data~~ is bar code data.

10. (Original) The system of claim 8, wherein the application program is a POS application program.

11. (Currently Amended) A computer-readable medium carrying an object program that is a client object when an application program is run, the object program comprising:

instructions for passing first character string ~~data~~ to a server object relative to the client object by invoking an interface object capable of passing the first character string ~~data~~ through an operating system to the server object; and

wherein the passing instruction has an executable command for running a process invoking the interface object to cast the first character string ~~data~~ declared as a first data type as a basic string data type, whereby the number of characters including null data in the first character string data is countable irrespective of ~~an~~ the object-declared type of the first character string ~~data~~, the passing instruction further having instructions for detecting an effective number of characters in the first character string ~~as~~ by analyzing its basic string data type representation, and converting the effective number of characters in the first character string to a second character string data that can be passed by the operating system to the server object, without using binary conversion to convert the first character string to a special format.

12. (Currently Amended) The computer-readable medium of claim 11, wherein the object program is an application program capable of processing a character string data containing null data, or a peripheral device class control object.

13. (Currently Amended) The computer-readable medium of claim 11, wherein the first character string ~~data~~ is bar code data, and the application program is a POS application program.

14. (Currently Amended) A computer-readable medium carrying an object program that is a server object when ~~running~~ an application program is run, the object program comprising:

an executable command for ~~processing~~ casting a first character string, data passed to the server object from a client object thereof through an interface object running on an operating system, declared as a first data type, as a basic string data type, whereby the number of characters including null data in a middle portion of the first character string data is countable irrespective of an object-declared type of the first character string data, and processing the effective number of characters in the first character string determined from an analysis of its basic string data type representation.

15. (Original) The computer-readable medium of claim 14, wherein the object program is a peripheral device class control object, or a peripheral device service object.

16. (Currently Amended) The computer-readable medium of claim 14, wherein the first character string ~~data~~ is bar code data, and the application program is a POS application program.

17. (Currently Amended) A computer-readable medium carrying an interface object program for passing a first character string through a computer operating system from a client or first object to a server or second object when an application program is run, the interface object program comprising:

an executable command for casting the first character string ~~data~~ declared as a first data type as a basic string data type, whereby a ~~the~~ number of characters including null data in the first character string ~~data~~ is countable irrespective of ~~a~~ the declared type of the first character string ~~data~~ of the first object, detecting an effective number of characters in the first character string ~~as~~ by analyzing its basic string data type representation, and converting the

effective number of characters in the first character string to a second character string data—that can be passed by the operating system to the second object, without using binary conversion to convert the first character string to a special format.

18. (Currently Amended) The computer-readable medium of claim 17, wherein the basic string data is type representation of the first character string data ~~containing~~contains string length information.